Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte W. SCOTT THIELMAN

Appeal No. 2000-1213
Application No. 08/566,006

HEARD: March 19, 2002

Before PAK, LIEBERMAN, and PAWLIKOWSKI, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 8 through 19. Claims 1 through 7, the remaining claims in the application, stand withdrawn from consideration by the examiner as being directed to a non-elected invention.

According to appellant (Brief, page 3), "[t]he claims of the rejected group are believed to be each separately patentable..."

However, nowhere does the Brief provide the substantive arguments for the separate patentability of the subject matter of the individual claims on appeal consistent with 37 CFR § 1.192(c)(7) and (c)(8) (1999). See, e.g., Brief, page 7. Therefore, for purposes of this appeal, we select claim 8, the broadest claim on appeal, and decide the propriety of the grounds of rejection set forth by the examiner. See 37 CFR § 1.192(c)(7)(1999). Claim 8 is reproduced below:

8. Cellular flexible retroreflective sheeting having a width and length of no less than 12 inches by 12 inches comprising:

a first film of transparent thermoplastic material having a plurality of cubecorner reflective elements formed on one face thereof;

a second film of thin thermoplastic material disposed adjacent to said one face and covering said reflective elements; and

a plurality of continuous and uniform welds formed between said films by ultrasonically fusing said films together, said welds defining a continuous array of closed hermetically-sealed cells each having multiple retroreflective elements with air gaps between said reflective elements and said second film.

The prior art references relied upon by the examiner are:

McGrath	4,025,159	May 24, 1977
Bergeson et al. (Bergeson)	4,637,950	Jan. 20, 1987
Nelson et al. (Nelson)	4,895,428	Jan. 23, 1990
Szczech	5,138,488	Aug. 11, 1992
Walter	5,171,624	Dec. 15, 1992
Martin	5,264,063	Nov. 23, 1993
Coderre	5,272,562	Dec. 21, 1993

Claims 8 through 19 stand rejected under 35 U.S.C. § 103 as unpatentable over any of McGrath, Bergeson, Nelson, Szczech, Walter, Martin and Coderre.

We have carefully reviewed the claims, specification, and applied prior art, including all of the arguments advanced by both the examiner and appellant in support of their positions. This review leads us to conclude that the examiner's § 103 rejection is well founded. Accordingly, we will sustain the examiner's § 103 rejection for the factual findings and conclusions set forth in the Answer and below.

The claimed subject matter is directed to a cellular flexible retroreflective sheeting. See claim 8. This cellular flexible retroreflective sheeting is further limited by a process limitation "ultrasonically fusing". *Id.*

The court provides guidance for analyzing the patentability of product-by-process claims in ***In re Thorpe,*** 777 F.2d 695, 697, 227 USPQ 964, 965-66 (Fed. Cir. 1985) as follows:

> Product-by-process claims are not specifically discussed in the patent statute. The practice and governing law have developed in response to the need to enable an applicant to claim an otherwise patentable product that resists definition by other than the process by which it is made. For this reason, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. *In re Brown*, 459 F.2d 531, 535, 173

> USPQ 685, 688 (CCPA 1972); *In re Pilkington,* 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969); *Buono v. Yankee Maid Dress Corp.,* 77 F.2d 274, 279, 26 USPQ 57, 61 (2d Cir. 1935).
>
> The patentability of a product does not depend on its method of production. *In re Pilkington,* 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969). If the product in a product-by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Marosi*, 710 F.2d 799, 803, 218 USPQ 289, 292-93 (Fed. Cir. 1983); *Johnson & Johnson v. W.L. Gore*, 436 F.Supp. 704, 726, 195 USPQ 487, 506 (D. Del. 1977); s*ee also In re Fesssman,* 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Here, appellant does not dispute the examiner's finding that the applied prior art references individually teach the claimed cellular flexible retroreflective sheeting, except for the claimed process limitation, i.e., ultrasonic welding. See Brief in its entirety. Appellant argues that the claimed process limitation renders the claimed cellular flexible retroreflective sheeting patentably distinguishable over those described in the applied prior art. See Brief, pages 3 and 4. Specifically, appellant argues (Brief, page 4) that:

> [T]he recitation in claim 8 of "welds" formed by ultrasonic fusing clearly distinguishes applicant's product as a product having ultrasonic welds, as opposed to bonded regions formed by other different methods taught by the prior art. Thus, the process limitation in the claim clearly helps to distinguish over the prior art products. In such a circumstance, the process limitation

> must be considered. See, e.g., In re Luck and Gainer, 177 U.S.P.Q. 523, 525 (CCPA 1973) and In re Hallman, 210 U.S.P.Q. 609, 611 (CCPA 1981). Accordingly, the Examiner's disregard of the single process limitation in claim 8 is believed to be improper, particularly when this limitation gives clear meaning to a product limitation that is nowhere found in or suggested by the art of record.

Appellant, however, has not demonstrated that the welds produced by ultrasonic fusing is patentably different from the welds produced by the other conventional thermal bonding techniques described in the applied prior art. See Brief, pages 3 and 4. In this regard, we want to emphasize that mere arguments in the Brief or conclusory statements in the specification cannot take the place of objective evidence. *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984); *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972).

Even were we to accept that the welds produced by ultrasonic fusing are different from the welds described in the applied prior art, our conclusion would not be changed. As correctly found by the examiner (Answer, pages 3 and 4), the applied prior art references, namely Szczech, Nelson, Martin and Walter, teach that ultrasonic welding can be used to bond the sheets (films) of a cellular flexible retroreflective sheeting. Thus, we concur with the examiner that the applied prior art would have at least

suggested the claimed cellular flexible retroreflective sheeting bonded with ultrasonic welds. One of ordinary skill in the art would have had a reasonable expectation of successfully bonding the sheets (films) of a cellular flexible retroreflective sheeting with ultrasonic welding (conventional thermal bonding technique).

Appellant appears to argue that the applied prior art does not provide the details as to how to carry out ultrasonic welding and thus, does not provide a disclosure that would "enable one" to practice the ultrasonic welding technique in forming a cellular flexible retroreflective sheeting. See, e.g., Brief, page 4. We disagree.

Initially, we observe that the inventions disclosed in the applied prior art references enjoy a statutory presumption of validity since the applied prior art references are U.S. patents. 35 U.S.C. § 282 (1999); *In re Spence*, 261 F.2d 244, 246, 120 USPQ 82, 83 (CCPA 1958). The enablement requirement under 35 U.S.C. § 112 is a prerequisite to validity. *Cf. Spence*, 261, F.2d at 246, 120 USPQ at 83. It follows that the ultrasonic welding described in the applied prior art is presumed enabling absent clear and convincing evidence to the contrary. However, on this record, appellant has not provided any evidence to establish that the applied prior art is not enabling.

We also observe that the determination of the sufficiency (enablement) of any given disclosure requires consideration of not only the amount of direction and guidance provided in the applied prior art documents, but also the relative skill of those in the art, the nature of the invention and the state of the prior art (information generally available in the art). *In re Vaeck*, 947 F.2d 488, 495, 20 USPQ2d 1438, 1444 (Fed. Cir. 1991). Appellant's position does not take into account, *inter alia*, the state of the prior art regarding "ultrasonic welding techniques." On this record, appellant has not demonstrated that without more detail information, one of ordinary skill in the art would have required undue experimentation to bond the films of a cellular retroreflective sheeting with ultrasonic welding.

Having concluded that the applied prior art provides a disclosure which would enable one of ordinary skill in the art to use ultrasonic welding and would have suggested the claimed cellular flexible retroreflective sheeting, we determine that the examiner has established a *prima facie* case of obviousness regarding the claimed subject matter within the meaning of 35 U.S.C. § 103.

As a rebuttal to the *prima facie* case established by the examiner, appellant states (Brief, page 6) that:

> As shown by actual samples submitted in the file of the instant application, applicant's technique produces sheeting having exceptional brilliance.

The samples, however, are not submitted in the form of a declaration or an affidavit (under oath). 37 CFR § 1.132 (1999); *In re Orfeo*, 440 F.2d 439, 441, 169 USPQ 487, 489 (CCPA 1971). Nor is there any comparison between the closest prior art and these samples. *In re Baxter Travenol Labs.*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991); *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984). Moreover, there is no indication that these samples are formed by ultrasonic welding techiniques other than that specifically described in the application. *In re Clemens*, 622 F.2d 1029, 1035, 206 USPQ 289, 296 (CCPA 1980)(the evidence relied upon must be commensurate in scope with the claims).

In view of the forgoing, we affirm the examiner's decision rejecting all the claims on appeal under 35 U.S.C. § 103.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

CHUNG K. PAK Administrative Patent Judge	)	
PAUL LIEBERMAN Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
BEVERLY A. PAWLIKOWSKI Administrative Patent Judge	)	

CKP/lp

RONALD A SANDLER
JONES DAY REAVIS & POGUE
77 WEST WACKER DRIVE
CHICAGO IL 60601-1692